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REMARKS

Claims 107-121 and 145-186 have been pending in the application. The Applicants note with appreciation the allowance of Claims 109, 112-119, 161 and 173-175.

Claims 145-155, 160, 162, 165-172 and 176-178 have been indicated to be allowable if rewritten in independent form. Consequently, they have been rewritten so as not to depend upon rejected base claims.

The Examiner indicates that Claims 170-172 are objected to for depending on the rejected independent base Claims. However, Claim 109, on which these claims depend, has been allowed. Therefore, dependent Claims 170-172 are in condition for allowance as well.

Claims 110 and 111 have been rejected under 35 U.S.C. 112 as dependent upon a canceled base claim. Claim 110 has been canceled and Claim 111 has been amended to depend upon the independent Claim 109, which has been indicated as allowable.

Claims 107, 108, 120, 121, 156-159, 163, 164, and 179-182 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Goldfine, *et al.* (WO98/40732). This rejection is respectfully traversed and reconsideration is requested. However, to further the prosecution of this application, Claims 107, 108 and 120 have been canceled. Dependent Claims 121, 156-159, 163 and 164 have been amended to depend on the allowed base claims. The Applicants do not concede to the rejection and reserve the right to prosecute these claims in continuation applications.

Independent Claim 179 is similar to independent Claim 112, which the Examiner has indicated as allowable. Neither Goldfine *et al.* nor Thompson, nor their combination, teach or suggest connecting drive windings of the eddy-current sensor arrays in series, as recited in Claim 179. Moreover, the Examiner does not indicate where such features can be found in Goldfine *et al.* and Thompson. Therefore, independent Claim 179 is not obvious in view of the combination of Goldfine *et al.* and Thompson. Dependent Claims 180-186 depend on Claim 179 and therefore are patentable in view of Goldfine *et al.* and Thompson for at least the same reasons as above.

New Claims 187-191 depend on the claims previously indicated as allowable and, therefore, are patentable for at least the same reasons as the respective independent claims on which they depend.

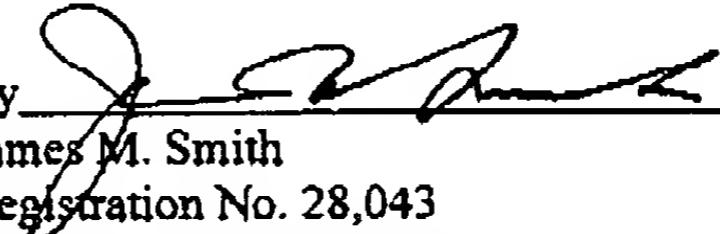
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CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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